

What is claimed is:

*1.* A polarizing glass comprising geometrically anisotropic particles dispersed in an oriented manner in at least the surface of a glass base body,  
wherein the glass base body is denoted by the weight percentages of  
50-65 percent  $\text{SiO}_2$ ,  
15-22 percent  $\text{B}_2\text{O}_3$ ,  
0-4 percent  $\text{Al}_2\text{O}_3$ ,  
2-8 percent  $\text{ZrO}_2$ ,  
6 percent  $\text{Al}_2\text{O}_3 + \text{ZrO}_2 < 12$  percent,  
6-16 percent  $\text{R}_2\text{O}$  (where R denotes at least one from among Li, Na, and K),  
0-3 percent  $\text{Li}_2\text{O}$ ,  
0-9 percent  $\text{Na}_2\text{O}$ ,  
4-16 percent  $\text{K}_2\text{O}$ ,  
 $\text{Li}_2\text{O} + \text{Na}_2\text{O} < \text{K}_2\text{O}$ ,  
0-7 percent  $\text{BaO}$  and/or  $\text{SrO}$ , and  
0-3 percent  $\text{TiO}_2$ ;  
comprises per 100 weight percent of essentially the above composition at least 0.15-1.0 percent Ag and at least the chemical equivalent to Ag of Cl and/or Br; and the geometrically anisotropic silver particles are metallic Ag particles.

*2.* The polarizing glass according to claim 1 wherein the glass comprises 0.5-5 weight percent  $\text{BaO}$ .

*3.* The polarizing glass according to claim 1 wherein the glass comprises 0.002-0.03 weight percent  $\text{CuO}$ .

*4.* The polarizing glass according to claim 1 wherein the glass substantially does not comprise  $\text{CuO}$  and substantially does not exhibit photochromic characteristics.

5. The polarizing glass according to claim 1 wherein the glass comprises 1-3.5 weight percent  $\text{Al}_2\text{O}_3$ .

6. The polarizing glass according to claim 1 wherein the glass comprises 4-7 weight percent  $\text{ZrO}_2$ .

7. The polarizing glass according to claim 1 wherein the glass comprises 7-10 weight percent  $\text{Al}_2\text{O}_3$  and  $\text{ZrO}_2$ .

8. A process for preparation of a polarizing glass comprising steps of;  
heat treating a shaped glass having the composition denoted by the weight percentages of  
50-65 percent  $\text{SiO}_2$ ,  
15-22 percent  $\text{B}_2\text{O}_3$ ,  
0-4 percent  $\text{Al}_2\text{O}_3$ ,  
2-8 percent  $\text{ZrO}_2$ ,  
6 percent  $\text{Al}_2\text{O}_3 + \text{ZrO}_2 < 12$  percent,  
6-16 percent  $\text{R}_2\text{O}$  (where R denotes at least one from among Li, Na, and K),  
0-3 percent  $\text{Li}_2\text{O}$ ,  
0-9 percent  $\text{Na}_2\text{O}$ ,  
4-16 percent  $\text{K}_2\text{O}$ ,  
 $\text{Li}_2\text{O} + \text{Na}_2\text{O} < \text{K}_2\text{O}$ ,  
0-7 percent  $\text{BaO}$  and/or  $\text{SrO}$ , and  
0-3 percent  $\text{TiO}_2$ ;  
comprising per 100 weight percent of essentially the above composition at least 0.15-1.0 percent Ag and at least the chemical equivalent to Ag of Cl and/or Br to deposit out silver halide particles;  
drawing the glass to elongate the silver halide particles in the glass; and  
reducing at least part of the elongated silver halide particles in the glass to form geometrically anisotropic silver particles.

9. The process for preparation of claim 8 wherein the shaped glass is polished and/or etched.

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